

Assembly Instructions for Portable Net Stands from Chain Link Rail



This page has a Bill of Materials and Assembly Instructions for making a portable net stand as shown on the right. The stand can be assembled from readily available materials from Lowe's. It can be easily disassembled for transport or storage. Entire assembly, including the net, can be picked up by one person and moved to the side of a gym or sports court. That is an advantage because the net does not have to be removed every time the stands are moved. The net is tensioned against the horizontal bar, thus eliminating the need for an excessive amount of weight that is required in most other designs.

Bill of Materials

All parts shown were priced at Lowe's in November 2008. Home Depot also has chain link parts, but does not carry the items listed. Note: Home Depot has chain link parts, but they do not have Rail End Clamps. The 10'6" rails from Lowe's have one end that is swaged (reduced in size to fit into the straight end of another rail piece). Home Depot has 10' rails without a swaged end. If those are used, a separate inline clamp is available.

Qty	Description	Price	Extension
4	1 3/8" x 10'6" Top Rail	9.61	38.44
5	1 3/8" Rail End Clamp & Bolt	1.08	5.40
2	5 1/4" Turnbuckle (eye, hook)	2.59	5.18
4	1 1/4" Rubber Leg Tips (2 pack)	2.48	9.92

8	1/4" x 3" Eye Bolt	1.75	14.00
2	6 1/4" Turnbuckle	3.45	6.90
11	1/4" x 2" Galvanized Hex Bolt	.29	3.19
11	1/4" Galvanized Hex Nut	.09	.99
		Total	84.02



Assembly Instructions

1. Cut rails to the following sizes (do not include the swaged end on any of the pieces except for the pieces of the horizontal bar as noted below):

- Horizontal bar (option 1): First determine how the net stand is going to be stored and if there is a need to transport the net stand in a vehicle that cannot easily carry the 10'6" lengths. If the longer lengths can be transported and stored with no problem, leave two of the lengths intact and cut another piece that is 1' 4". That will give an overall length of 21' 10 " (resulting in approximately 22' to the center of the posts). Note that 3" of the

swaged end for 2 of the pieces will fit into another rail piece, so a total of 6" is not counted in the overall length.

- Horizontal bar (option 2): Only if the option 1 is not used and shorter lengths must be used for transport or storage. Cut 3 pieces of 5'9" including one swaged end on each piece. Cut another piece 5'4" (not including a swaged end) for an overall level of 21'10" (resulting in approximately 22' to the center of the posts). Note that 3" of the swaged end for 3 of the pieces will fit into another rail piece, so a total of 9" is not counted in the overall length..
- Posts: 36"
- Bases: 28" (length can be shorter if desired as long as they are long enough to give good stability to the unit).
- Center Support: 21" (length is not critical).

2. Remove rough burrs from the cut ends with a file, Dremel tool, or other convenient method.



3. Assemble the two end pieces taking care to make the joint square. Use the bolt supplied with the clamp and add one bolt and one eyebolt for extra rigidity to the joint. The eyebolt is used to attach the bottom of the net. The 1/4" holes are already in the clamp, but matching holes need to be drilled in the rail.

4. Add the rubber furniture leg tips to the 3 exposed ends of each of the end pieces and one end of the center support bar. The rail is slightly larger than the rubber tips, so it is a very tight fit. Use a little liquid soap or KY to make the installation easier.

5. Fit the lengths of the horizontal bar together. Drill a 1/4" hole at each joint and add one 1/4" x 2" bolt and nut to keep the parts from twisting.

6. Fasten the center support to the horizontal bar with an end clamp. Use the bolt that comes with the clamp and drill a 1/4" hole in each rail to match the holes in the clamp. Take care to make the joint square before tightening the bolts. All joints should be assembled in this way.

7. Fasten the horizontal bar to each end post. Adjust the height of the clamp on the posts so that the bar is at the same height at the post as at the center of the bar.

8. Fasten the 6 1/4" turnbuckles to the horizontal bar and end posts as shown in the photo.

Drill 1/4" holes in the tubing approximately 7" from the center of the joint. Insert eyebolts into each joint. Spread the eyes of the eyebolts so that there is an opening large enough to fasten the eyes of the turnbuckle. The purpose of these turnbuckles is to keep the joint from getting out of square when tension is applied to the net.

9. Fasten an eyebolt to each end post 36" from the court surface. When measuring the height, any error should be on the high side. If the attachment point is too low, it may be difficult to get enough net tension to make it 34" in the center (especially if using a heavyweight net).

10. Fasten the net cord to the top eyebolts on the post. Instead of attaching the net directly to the posts, fasten each end to the 5 1/4" turnbuckles shown in the bill of materials. That will make it easier to get the proper tension on the net so that the center of the net is 34" from the court surface. The net cord will tend to stretch after installation and the slack can be easily taken up with the turnbuckles. The bottom of the net is tied to the bottom eyebolts on the net post. Do not pull those connections too tight or it will pull the net down making it difficult to get the net 34" high in the middle.